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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,239	09/28/2005	Harald Schwahn	278349US0PCT	4258

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
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ALEXANDRIA, VA 22314

EXAMINER
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HINES, LATOSHA D

ART UNIT	PAPER NUMBER
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1775

NOTIFICATION DATE	DELIVERY MODE
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08/17/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/551,239	<b>Applicant(s)</b> SCHWAHN ET AL.	
	<b>Examiner</b> LATOSHA HINES	<b>Art Unit</b> 1775	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 21-37,39-43 and 45-71 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 21-37,39-43 and 45-71 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                          |

### **DETAILED ACTION**

1. Claims 21-37, 39-43 and 45-71 are pending. Claims 45-71 are new and claims 38 and 44 are canceled.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on December 26, 2010 has been entered.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 21, 36, 45, 46, 62, and 68-71 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a NEW MATTER rejection. In claims 21, 36, 45, 46, 62, and 68-71, applicant claimed "the additive does not comprise a carrier oil"; "does not comprise a carrier oil on an olefin polymer"; and "does not comprise a polyisobutenes succinimide". However, the specification only

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gives various examples, results and teachings of "carrier oils" and "polyisobutenes succinimides". For example, page 7 of the present specification:

*"The fuel composition according to the invention may additionally comprise further customary components and additives. These include **primarily carrier oils** without marked detergent action, for example mineral carrier oils (base oils), in particular those of the viscosity class "Solvent Neutral (SN) 500 to 2 000", and synthetic carrier oils based on olefin polymers having Mn = from 400 to 1800, in particular based on polybutene or polyisobutene (hydrogenated or nonhydrogenated), on poly-alpha-olefins or poly(internal olefin)s."*

and page 9 of the present specification:

*"Examples: The gasoline fuel additive used was a commercial additive package comprising 60% by 5 weight of detergent additive, polyisobutenamine (Mn = 1 000 g/mol), and 32% by weight of carrier oil (tridecanol etherified with 22 units of butylene oxide)."*

Applicants have not provided a clear statement of support in the specification that carrier oils or polyisobutenes succinimides are not present in the fuel.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21-37, 39-43 and 45-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over ABRAMO et al. (US 5,089,028) in view of SCHWAHN et al. (US 2003/0140552).

ABRAMO et al. disclose a gasoline additive which can be used in a minor effective amount as a carburetor, port fuel injector and in-take valve cleanliness additive which limits the amount of deposit formation. The components of the additive synergistically clean the fuel system of a spark ignition internal combustion engine, column 1 lines 30-47. The additive contains polyalkenyl succinimide which is the reaction product of a polyalkenyl succinic anhydride and a polyalkylene polyamine, column 1 lines 53-67. ABRAMO et al. disclose that the fuel contains paraffins, olefins, aromatic hydrocarbons, or mixtures thereof. The fuel also comprises up to 50 % alcohol or ethers, such as methanol and/or ethanol. See column 5, lines 26-56.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the alcohol amount to achieve a desired result. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

ABRAMO et al. does not explicitly or implicitly disclose various types of additives used in applicants' invention.

However, SCHWAHN et al. discloses an invention related to fuel additive compositions for internal combustion engines and to fuels that contain the corresponding additives for internal combustion engines (abstract).

The preferred fuel additive compositions according to the invention comprise: an alcohol, preferably ethanol; additives containing groups derived from succinic with hydroxyl and/or amido and/or imido groups are preferably corresponding derivatives of polyisobutenyl succinic anhydride having a Mn of from 150 to 5000 (paragraph 0060); polyalkenemonoamines or polyalkenepolyamines or functional derivatives thereof. The additives which can be used according to SCHWAHN et al. include poly-C2-C6-alkeneamines or functional derivatives thereof; for example, based on polyethylene, polypropene, polybutene or polyisobutenes, or mixture thereof, having a Mn of 150 to 5000 (paragraph 0034 and 0036); additives containing groups produced by Mannich reaction of substituted phenols with aldehydes and mono- or polyamines (paragraph 0061); polyetheramines are poly-C2-C6-alkylene oxide amines and examples of polyalkeneamines are poly-C2-C6-alkene-amines, and functional derivatives thereof, in each case having a preferred Mn from about 150 to 5000. SCHWAHN et al. has met the limitations of claim 21 and 25-28. Additives containing groups produced by Mannich reaction of substituted phenols with aldehydes and mono- or polyamines (paragraph 0061).

The gasoline fuel may furthermore have an olefin content of not more than 21, e.g. from 6 to 21, % by volume (paragraph 0070). The benzene content may be not more than 1.0, e.g. from 0.5 to 1.0, % by volume; the oxygen content may be, for example, from 0.1 to 2.7% by weight (paragraph 0072). The fuel may be, for example, a gasoline fuel having aromatics content of not more than 42, e.g.

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from 20 to 42% by volume (paragraph 0069). The further fuel additives which may be used and which have the polar groups are added to the fuel usually in an amount of from 10 to 5000 ppm, in particular from 50 to 1000 ppm (paragraph 0068) and a sulfur content of not more than 150 ppm (paragraph 0069).

SCHWAHN et al. discloses a fuel composition wherein all of the physical properties of the gasoline are present. In addition, a *prima facie* case of obviousness exists because the claimed ranges overlap or lie inside ranges disclosed by the prior art, see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90. See MPEP 2131.03 and 2144.05.

Schwahn et al. discloses in paragraphs 0077, the carrier oil comprising tridecanol etherified with butylene oxide units.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the synergistic additives of SCHWAHN et al. in the fuel composition ABRAMO et al. in order to reduce in-take valve deposits in a gasoline engine.

A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545,549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968). In addition, "A reference can be used for all it's

realistically teachings and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

### ***Response to Arguments***

7. Applicants' arguments filed 08 November 2010 have been fully considered but they are not persuasive.

a. Applicants argued that Abramo and Schwahn explicitly suggest improving the action of a detergent with specific carrier oil mixtures. Applicants have amended the present invention to include "no carrier oils". Applicants do not have support in the specification of the present invention to claim "no carrier oils". However, Abramo discloses in column 3, carrier fluids which comprise of esters and the carrier fluid can be less than 80 wt%. Abramo discloses "less than 80 wt%". For examination purposes, the examiner is interpreting the claim to encompass zero.

b. Applicants also argue that examples and comparative examples defined in the specification demonstrate unexpected results. The examiner acknowledges these results; however, the examples are insufficient to overcome the above rejection because (1) applicants have not compared the claimed invention to the teachings of the reference, and (2) the examples are not commensurate in scope with the claims because the examples are directed to specifics not literally defined by the claims. For instance, the examples use specific amounts, a specific antioxidant and a specific oil blend which are all not commensurate in scope with claim 21 at least. The examples no way allow the examiner to

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determine a trend for the results for any and all amounts of additive (no carrier oil present in claim 21 and examples comprise carrier oil). Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LATOSHA HINES whose telephone number is 571-270-5551. The examiner can normally be reached on Monday thru Thursday from 8 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Marcheschi can be reached on 571-272-1374. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LATOSHA HINES/  
Examiner, Art Unit 1775

/Ellen M McAvoy/  
Primary Examiner, Art Unit 1771